



## **Technical Assistance Services for Communities**

**Contract No.: EP-W-07-059**

**TASC WA No.: TASC-4-HQ-OSRTI**

**Technical Directive No.: 4.0 TD#2 U.S. Coast Guard ISC Kodiak**

### **Womens Bay Subsistence Activities Report**

#### **Introduction**

This summary report provides information on current subsistence practices that could be affected by contamination from the U.S. Coast Guard ISC Kodiak Base in inner Womens Bay, Kodiak, Alaska. This report is provided through the U.S. Environmental Protection Agency's (EPA's) Technical Assistance Services for Communities (TASC) Program.

There is little information about sources of contamination from the U.S. Coast Guard ISC Kodiak Base to inner Womens Bay before 1972. There is some evidence that fuel spills into the bay occurred before this time, including spills from the power plant during the 1964 earthquake. Sediment samples collected from inner Womens Bay show that the head of the bay has the highest levels of petroleum-related chemicals. This indicates that the chemicals may have come from spills from the Air Stations and other areas of the Base.

While the last sediment study (1999) showed that chemicals in sediments are not likely to harm marine organisms, more study is needed to understand the sources and extent of contamination in inner Womens Bay. More study could also include the effects the contamination might have on wildlife and people who consume wildlife from this area.

The information contained in this summary was obtained from:

- Attendance at a Technical Assistance Services Meeting in Kodiak, Alaska on September 10, 2012, and discussions with 10 meeting attendees:
  - Rick Rowland, Natural Resources Director, Sun'aq Tribe of Kodiak
  - Pamela Bumsted, Ph.D., Environmental Project Manager, Sun'aq Tribe of Kodiak
  - Bob Polasky, Chief Executive Officer and Tribal Administrator, Sun'aq Tribe of Kodiak
  - Iver Mulatin, Tribal Council Chair, Sun'aq Tribe of Kodiak
  - Edward DeNoyelles, Environmental Project Manager, U.S. Coast Guard
  - Joe Dinnocenzo, District Manager, Kodiak Soil and Water Conservation District
  - Bryan Knagin, Sun'aq Tribe of Kodiak
  - Trisha Pruitt, Sun'aq Tribe of Kodiak
  - Juanzetta Eads, Sun'aq Tribe of Kodiak
  - Vicki DeNoyelles, Sun'aq Tribe of Kodiak
- An in-person discussion with Rick Rowland and Bob Polaski of the Sun'aq Tribe of Kodiak on September 10, 2012.

- In-person discussions with the following community members on September 11, 2012:
  - Iver Malutin, Tribal Council Chair, Sun'aq Tribe of Kodiak
  - Brenda Schwantes, Tribal Council Member, Sun'aq Tribe of Kodiak
  - Frank Petersen, Jr., Program Services Director, Sun'aq Tribe of Kodiak
  - Virginia Absten, Finance Director, Sun'aq Tribe of Kodiak
- A telephone discussion with Joe Dinnocenzo, District Manager for Kodiak Soil and Water Conservation District, on September 15, 2012.
- Telephone discussions with Katherine Brown, Tribal Coordinator, EPA Region 10 from June to September 2012.

### **Background Information on Womens Bay**

Womens Bay is located on the west side of Kodiak Island, approximately eight miles south of Kodiak. The coastline of Womens Bay is located at the base of Old Womens Mountain and is adjacent to the U.S. Coast Guard ISC Kodiak installation. Inner Womens Bay is bordered by shoreline to the north and the Nyman Peninsula to the south. Inner Womens Bay is a restricted access area controlled by the U.S. Coast Guard, though lack of enforcement means that this area within the base is still used by the public. Subsistence activity locations noted in this report include inner Womens Bay, greater Womens Bay and coastal land surrounding both areas.

Womens Bay has been a traditional use area for Alaska Natives on Kodiak for many generations. It holds particular historic significance for members of the Sun'aq Tribe of Kodiak and nine other Kodiak Island tribes. This area was also used for commercial fishing and trapping prior to U.S. military operations.

Military use of Womens Bay began before World War II and continues to the present day. The U.S. Navy, U.S. Air Force and more recently the U.S. Coast Guard have all held a presence in the area. Military operations over the last seven decades include ordnance manufacturing, storage and detonation, fuel storage and waste dumping.

The U.S. Army Corps of Engineers and U.S. Coast Guard have documented contamination from metals, polyaromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) in inner Womens Bay. Tribal members are concerned about contamination of Womens Bay from military activity, the potential health impacts of contamination, commercial use and other non-point pollution sources. Tribal members are also concerned about access restriction and declining fish and wildlife populations.

### **Importance of Subsistence Information**

Information on traditional and current subsistence practices is crucial to understanding how those practices may be or have been affected by contamination in Womens Bay. Subsistence information can inform future studies of Womens Bay, ensuring a more impactful and effective strategy for potential cleanup of the area.

Subsistence information is considered confidential, and hesitation on sharing subsistence information was a topic of conversation with tribal members. Though participation was voluntary, some tribal members expressed concern over how subsistence information might be used by EPA. To respect the privacy of tribal members, information contained in this report is general in nature.

## **Categories of Subsistence Use**

Subsistence practices in the Womens Bay area are grouped into three categories for the purposes of this report:

1. Fishing and seafood harvesting
2. Hunting and egg gathering
3. Native plant harvesting

For each of these categories, TASC provides bulleted information heard from subsistence users on significance of the activity, species harvested, harvest locations and concern about the activity.

### **1. Fishing and Seafood Harvesting**

- Significance: Traditionally, Womens Bay has been a significant area for fishing and harvesting of seafood. Its close proximity to Kodiak and its abundance of wildlife made it an ideal location for subsistence fishing.
- Species: Red salmon, silver salmon, pink salmon, halibut, Dungeness crab, king crab and clams.
- Locations: Areas throughout greater Womens Bay and along the shoreline are used for fishing and seafood harvesting, including Sometimes Island and other islands in the Bay. The area of Womens Bay closest to the mouth of the Buskin River was historically an important location for subsistence fishing but is less so now as salmon populations have declined. Some tribal members named inner Womens Bay as a site for collecting clams for crab pot bait and limited sport fishing.
- Areas of Concern:
  - **Population decline**: Tribal members expressed concern over continued decline in fish and seafood populations. Tribal members noted that salmon closer to the mouth of the Buskin River and Dungeness and king crab throughout the Bay were in decline. Sea lions were once a species of significance to subsistence users and are said to no longer be present in Womens Bay. Contamination, development and overfishing were named as possible reasons for population decline.
  - **Contamination**: Subsistence users expressed concern about potential contamination of Womens Bay and other areas adjacent to the U.S. Coast Guard ISC Kodiak base. Tribal members had varied levels of concern about the corresponding impact on what was harvested and where. Tribal members associate contamination with declining populations of fish and seafood.

- Access restriction: Though there is currently limited enforcement, inner Womens Bay has been a restricted access area since 1941. Interviewees expressed that they had less interest in using the area because of the restriction. Despite the restrictions, inner Womens Bay is still used by native and non-native sport fishers to a small degree, but is not a location for subsistence fishing with nets. The fact that the area is restricted, regardless of enforcement, deterred subsistence users.
- Competition: Interviewees expressed that the greater Womens Bay area is overfished and has been impacted by an increase in tourism and sport fishing operations.

## **2. Hunting and Egg Gathering**

- Significance: Subsistence users cited hunting of birds and game animals and gathering of seagull eggs as significant activities in the Womens Bay area.
- Species: Ducks (Golden Eye, Eider, Blue Bills), geese, seagulls, deer, elk and rabbit.
- Locations: Shoreline areas near Bells Flats, Pillar Mountain and Old Womens Mountain were named as important hunting areas. Sometimes Island and other islands in Womens Bay are used for gathering seagull eggs.
- Areas of Concern:
  - Population decline: Decline in bird populations is thought to be a result of increase commercial and sport operations. Increased development along the shoreline was also cited as a possible reason for declining wildlife populations.
  - Contamination: Subsistence users expressed concern regarding military debris and bunkers on land surrounding Womens Bay. How this contamination and exposure might harm game animals is an area of concern.
  - Access restriction: U.S. Coast Guard access restrictions, whether enforced or not, deters subsistence use in this area.

## **3. Native Plant Harvesting**

- Significance: Gathering native plants is a common subsistence activity on lands surrounding Womens Bay. Berries are an important food source for subsistence users.
- Species: High and low bush cranberries, salmon berries, blueberries, rosehips and moss.
- Locations: Native plants are harvested on shoreline areas of Bells Flats, Pillar Mountain and Old Womens Mountain.
- Areas of Concern:
  - Contamination: Subsistence users expressed concern over military debris and bunkers on land surrounding Womens Bay. There is concern over the safety of using these areas to harvest plants due to possible contamination from debris and bunkers.
  - Access restriction: There is less subsistence use in this area due to lack of clarity regarding property boundaries and access via U.S. Coast Guard roads. Similar to fishing in inner Womens Bay, some interviewees expressed concern over gathering native plants in these areas due to access restrictions.

## Conclusions

Based on the discussions that informed this report, information on subsistence activity in the Womens Bay area is considered confidential. Despite this, subsistence users shared information on fishing and seafood harvesting, hunting and egg gathering, and native plant harvesting including information on significance of the activity, species harvested, harvest locations and concern about the activity. Concerns centered on access restriction, population decline and contamination, all of which have impacted the level of subsistence activity in Womens Bay in recent decades. Despite this, the area still holds significance for traditional use among Alaska Natives on Kodiak. Its proximity to the town of Kodiak and its historical and cultural worth to the Sun'aq Tribe of Kodiak make it a vital subsistence resource.

During discussions informing this report, TASC became aware of other documents that summarize subsistence activities in the larger Kodiak area. These documents include:

- Division of Subsistence, Alaska Department of Fish and Game, 1992. Training Manual, Division of Subsistence Household Survey Instrument.
- Division of Subsistence, Alaska Department of Fish and Game and Kodiak National Wildlife Refuge, U.S. Fish and Wildlife Service, 1992. Study Plan, Non-Commercial Harvests of Fish, Game, and Plants by Residents of the Road-Connected Portion of the Kodiak Island Borough.
- Kodiak Area Native Association and Division of Subsistence, Alaska Department of Fish and Game, 1983. Kodiak Island Area Local Fish and Game Resource Guide.

Depending on the subsistence activities recorded in those reports, more information on subsistence activities in Womens Bay may be needed. Further collaboration between the Sun'aq Tribe of Kodiak and other Alaska Natives on Kodiak, EPA, U.S. Coast Guard, Alaska Department of Environmental Quality and Kodiak Soil and Water Conservation District would encourage timely information sharing.

## **Skeo Solutions Contact Information**

Skeo Solutions Kodiak Project Manager  
Blair Stone-Schneider  
307-349-3601  
[bsschneider@skeo.com](mailto:bsschneider@skeo.com)

Skeo Solutions Work Assignment Manager  
Krissy Russell-Hedstrom  
719-256-6701  
[krissy@skeo.com](mailto:krissy@skeo.com)

Skeo Solutions Program Manager  
Michael Hancox  
434-989-9149  
[mhancox@skeo.com](mailto:mhancox@skeo.com)

Skeo Solutions Director of Finance and Human Resources  
Briana Branham  
434-975-6700 Ext. 233  
[bbranham@skeo.com](mailto:bbranham@skeo.com)

Skeo Solutions TASC Quality Control Monitor  
Eric Marsh  
512-505-8151  
[emarsh@skeo.com](mailto:emarsh@skeo.com)